

Page 43, line 6, change "FIG. 3" to --FIG. 14--.
lines 13-15, delete these lines in their
entirety.
line 24, change "(a XY-table in this" to --
(an XY-table 11 in this--.
line 25, delete "11".

Page 46, line 24, delete "The portions in FIG. 3
having the same reference".
line 25, delete this line in its entirety.

Page 47, line 1, delete this line in its entirety.
line 9, change "(a XY-table in this" to --
(an XY-table 11 in this--.
line 10, delete "11".

Page 50, line 4, after "that" insert --they--.

Page 51, line 15, change "to be filled in the" to
--filled-in in the--.

IN THE CLAIMS:

Please amend claims 1-3, 5-9, 11-13 and 15-17 as
follows:

1. (Amended) A method for machining a ceramic green
sheet for forming a plurality of feedthrough holes on the ceramic
green sheet, comprising [the steps of]:

[allowing] passing a laser beam emitted from a laser
source [to pass] through a diffraction grating to split the beam
into plural laser beams; and

simultaneously forming a plurality of feedthrough holes
within a desired area on the ceramic green sheet by irradiating the

[laser beams split into] plural laser beams onto the ceramic green sheet.

2. (Amended) A method for machining a ceramic green sheet according to Claim 1, wherein the ceramic green sheet is irradiated with the plural laser beams while allowing the ceramic green sheet to travel.

3. (Amended) A method for machining a ceramic green sheet according to Claim 1, wherein the ceramic green sheet is irradiated with the plural laser beams while allowing the ceramic green sheet to intermittently travel.

4. (Amended) A method for machining a ceramic green sheet for forming a plurality of feedthrough holes on the ceramic green sheet, comprising [the steps of]:

disposing a laser source for emitting a pulse laser beam, a diffraction grating for splitting the laser beam into plural laser beams, a galvano-scan mirror for allowing the plural laser beams to reflect with a predetermined reflection angle, a converging lens for individually converging the plural laser beams reflected from the galvano-scan mirror, and the ceramic green sheet so as to be arranged in a predetermined position;

[allowing] passing the laser beam emitted from the laser source [to pass] through the diffraction grating to split the laser beam into plural laser beams;

[splitting the beam into plural laser beams;]

irradiating the [split pulse] plural laser beams on the ceramic green sheet by allowing the plural laser beams to reflect with a galvano-scan mirror to simultaneously form a plurality of feedthrough holes within a desired area on the ceramic green sheet; and

repeatedly irradiating the ceramic green sheet with the plural laser beams by changing reflection angles of the galvano-

scan mirror to form a plurality of feedthrough holes within a different area on the ceramic green sheet.

6. (Amended) A method for machining a ceramic green sheet for forming a plurality of feedthrough holes on a ceramic green sheet, comprising [the steps of]:

disposing a laser source for emitting a pulse laser beam, a galvano-scan mirror for allowing the laser beam to reflect with a predetermined angle, a diffraction grating for splitting the laser beam into plural laser beams, a converging lens for individually converging the plural laser beams [split into plural beams], and the ceramic green sheet so as to be arranged in a predetermined position;

[allowing] directing the pulse laser beam emitted from the laser source onto the galvano-scan mirror;
reflecting the pulse laser beam with the galvano-scan mirror;

[allowing] passing the pulse laser beam reflected by the galvano-scan mirror [to pass] through the diffraction grating to split the pulse laser beam into plural laser beams;

simultaneously forming a plurality of feedthrough holes within a desired area on the ceramic green sheet by irradiating the ceramic green sheet with the [split pulse] plural laser beams; and

repeatedly irradiating the ceramic green sheet with the laser beams by changing reflection angle of the galvano-scan mirror to form a plurality of feedthrough holes within a different area on the green sheet.

7. (Amended) A method for machining a ceramic green sheet according to Claim 5, wherein the [pulse laser beam] ceramic green sheet is irradiated with the plural laser beams while allowing the ceramic green sheet to travel.

A 2 Sub B3 8. (Amended) A method for machining a ceramic green sheet according to Claim 1, wherein the diffraction grating is [formed using] made of a material having a high transmittance against the laser beam.

A 2 Sub C2 9. (Amended) A method for machining a ceramic green sheet according to Claim 1, wherein the [laser emitted from the] laser source is a CO₂ laser.

11. (Amended) An apparatus for machining a ceramic green sheet comprising:

a support member for supporting the ceramic green sheet;
a travel member for allowing the ceramic green sheet to travel along a predetermined direction;
a laser source;

A 3 a diffraction grating [for allowing] positioned with respect to the laser source such that the laser beam emitted from the laser source [to pass] passes through the diffraction grating to split the beam into plural laser beams; and

a converging lens for individually converging the plural laser beams [split into plural beams after passing through the diffraction grating] to irradiate the plural laser beams onto the ceramic green sheet supported with the support member.

12. (Amended) An apparatus for machining a ceramic green sheet comprising:

a support member for supporting the ceramic green sheet;
a laser source;

a diffraction grating [for allowing] positioned with respect to the laser source such that the laser beam emitted from the laser source [to pass] passes through the diffraction grating to split the beam into plural laser beams;

a galvano-scan mirror for reflecting with a predetermined reflection angle each of the plural laser beams

[after passing through the diffraction grating and being split into plural beams];

a galvano-scan mirror driving member for changing the reflection angle of the galvano-scan mirror; and

a converging lens for individually converging the plural laser beams after being reflected with the galvano-scan mirror at a predetermined angle to irradiate each of the plural laser beams onto the ceramic green sheet supported with the support member.

13. (Amended) An apparatus for machining a ceramic green sheet comprising:

A 3 a support member for supporting the ceramic green sheet;

a laser source;

a galvano-scan mirror for [allowing] reflecting the laser beam to reflect at a predetermined angle;

a galvano-scan mirror [deriving] driving member for changing the reflection angle of the galvano-scan mirror;

a diffraction grating [for allowing] positioned with respect to the laser source such that the laser beam reflected by the galvano-scan mirror at a predetermined angle [to pass] passes through the diffraction grating to split the beam into plural laser beams; and

a converging lens for individually converging the [laser beam split into] plural beams [after passing through the diffraction grating] to irradiate each of the plural laser beams onto the ceramic green sheet supported with the support member.

15. (Amended) A method for machining a ceramic green sheet for forming a plurality of feedthrough holes having the same shape and size on the ceramic green sheet, comprising [the steps of]:

A 4 [allowing] passing a laser beam emitted from a laser source [to pass] through the diffraction grating to split the laser beam into plural laser beams having a uniform shape and size

corresponding to the shape and size of feedthrough holes to be formed; and

simultaneously forming a plurality of feedthrough holes having a uniform shape and size onto the ceramic green sheet by irradiating the [laser beams uniformly split into] plural laser beams onto the ceramic green sheet.

16. (Amended) A method for machining a ceramic green sheet comprising:

[allowing] passing a laser beam emitted from a laser source [to pass] through a diffraction grating to split the laser beam into plural laser beams having an energy suitable for forming fine holes with a diameter of 50 μ m or less by irradiating the plural laser beams [split into plural beams] onto the ceramic green sheet; and

forming a plurality of fine holes having with a diameter of 50 μ m or less by irradiating the plural laser beams [split into plural beams] onto the ceramic green sheet.

17. (Amended) A method for machining a ceramic green sheet for forming a plurality of feedthrough holes on the ceramic green sheet one face of which is supported with a carrier film, comprising:

[allowing] passing a pulse laser beam emitted from a laser source [to pass] through a diffraction grating to split the beam into plural laser beams having such an energy that allows each [split] of the plural laser beams to penetrate through the ceramic green sheet but not to penetrate through the carrier film; and

forming a plurality of feedthrough holes on the ceramic green sheet by irradiating the [pulse laser beams split into] plural laser beams on one face of the ceramic green sheet that is not supported with the carrier film.